

**EFFECTIVENESS OF MUSIC THERAPY ON SLEEP QUALITY
AMONG SENIOR CITIZENS AT SELECTED OLD AGE
HOME IN DINDIGUL DISTRICT**

By

Mr. ARUN. R

Reg. No. 30106242



**A DESSERTATION SUBMITTED TO
THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI,
IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
DEGREE OF MASTER OF SCIENCE IN NURSING
(PSYCHIATRIC NURSING)**

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CERTIFICATE

Certified that this is the bonafide work of **Mr. ARUN. R**, Final Year M.Sc (Nursing) student of Sara Nursing College, Dharapuram, Submitted in Partial Fulfillment of the requirement for the degree of Master of Science in Nursing to The Tamil Nadu Dr. M.G.R Medical University, Chennai, under the Registration No.**30106242**.

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ABSTRACT

A study to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected old age home in Dindigul Dist.

The present study was conducted at “Anbalaya old aged home” in Dindigul. Pre experimental one group pre test and post test design was used for this study. Permission was obtained from the old age home administrator and data collection was done over a period of 4 weeks. The investigator has selected 50 samples with sleep disturbances through convenience sampling technique. Oral consent was obtained from the subjects. Groningen sleep quality scale was used for assessing the level of sleep quality. Then the investigator administered a music therapy for 30- 45 minutes for 14 consecutive days and post test was done after completion of the intervention. Descriptive and inferential statistics were used to analyze the findings of the study.

There was a significant difference ($P < 0.05$) found between the mean pretest score ($10.05(\pm 1.72)$) and post test score ($3.02(\pm 1.78)$) of sleep quality. There was a significant association ($P < 0.05$) found between the level of sleep quality and age, gender, education and marital status.

The findings of the study shows that music therapy is effective in increasing the level of sleep quality among senior citizens. So, music therapy can be practiced in old age home and in other set up to help patients and family members to cope with sleep disturbances.

CHAPTER - I

INTRODUCTION

“Music comes from heart of the human being , when emotions are born , they are expressed by sounds and when sounds are born they give birth to music”

(Old Chinese proverb)

Sleep is necessary for good health at all stages of life. The need for restorative sleep is not dependent on age, and should not be assumed to lessen with age. Generally, some changes in sleep may be considered part of normal ageing; however, normal changes should not cause personal dissatisfaction with quantity or quality of sleep. Along with a negative influence on health and quality of life, sleep disturbances in older people can be problematic due to safety concerns, increased risk of falls and injury, as well as negatively impacting on the wellbeing of bedroom partners and care.

Ageing is an irreversible process, “Oldage is an incurable disease”. There is 81 million senior citizen in India. 10lakhs in mumbai,. 90% of senior citizen are from unorganized sector with no social security, 40% below poverty line, 75% rural areas, 73% illiterate. Sleep disturbance in senior citizen is a widely under recognized and under treated medical illness. The risk of insomnia in the elderly increases with other illnesses and when ability to function becomes limited.

(National Institute of Health, 2009)

Sleep disruption is often a reason for residential care placement as cited and in residential care, poor residence sleep is often associated with disruptive Behavior and psychological distress. Music is pleasant and safe and can be used therapeutically for insomnia in senior citizens .The intervention is quick and easy to learn, is low cost, and could be used readily by nurses. Musical therapy provides benefits for people of

all various ages and conditions and is therefore utilized in many settings. As a result of the therapy's effectiveness musical therapy is used in nursing homes, hospitals, sporting events, and also in households.

Statistically the U.S population is growing older and this older population has the most demanding healthcare needs when compared to younger individuals. Today, music is the most common form of therapy being used in nursing homes and other geriatric facilities. In nursing homes, music therapy has been proven to provide a sort of emotional well-being to the residents and helps with primary health problems; such as high blood pressure and breathing rates. Music therapists spend 15% of their time working in nursing homes and 29% with senior citizens in the privacy of their homes. Music therapy is also used to encourage emotional expression, promote social interaction, and relieve physical symptoms from its patients. This type of therapy is being used by trained health care professionals that want to offer another option to encourage positive mental health and enhance the quality of life for their patients.

(Ohayon,2006)

Music therapy has a long history doing back to ancient orphic school in Greece. The ancient Greeks and Romans considered music as a fundamental factor of physical and mental harmony. The old testament mentioned music therapy where king David said to have cured melancholic mood of king soul by on the harp .

(Merriam Webster, 1999)

NEED FOR THE STUDY:

Globally, the proportion of people aged 60 years and over is growing faster than any other age group. By the year 2025, people in this age group will reach a total of 1.2 billion and this will rise to 2 billion in the year 2050 with 80% of them living in developing countries.

Surveys have estimated that more than 50% of community living people age 60 or older experience sleep disturbance. Sleep disorder can result in tiredness, depression, greater anxiety, irritability, pain sensitivity, muscle tremors and lack of day time alertness.(WHO,2010)

Ageing is a normal, universal and inevitable change, which takes place even with best of nutrition and health care. Elderly people are vulnerable to physiological, mental and social crisis and to a typical presentation of illness common to the age. In India, 3.9% of the population comprises people above 65 years of age and expected to reach 21.8% by 2030. In Karnataka, out of a population of 5.5 crore, 8% are elderly citizens. 1st of October every year has been observed as “World Elders’ Day” globally.

Analyzed data from 6,651 people over the age of 70. The survey result shows 18% of the seniors reported having 4 to 8 Insomnia symptoms in the last week, 44% had 1 to 3 symptoms, 1t 5 % have disturbed, 7 to 23% have average sleep.

(U.M. Institute for Social Research, Ann Arbor Healthcare System,2009)

Older adults are the most rapidly growing segment of the population. Today there are about 77 million aged people in India. (i.e. above 60 years of age) WHO

report of 2004 states that 236 elderly people per 10,000 suffer from mental illness mainly due to sleep disturbances. **(National institute of health 2008)**

The prevalence of insomnia in those living in institutions was 27.1% compared to 9.3% in those living at home. Symptoms related to depressed mood, severity of illness and some non specific symptoms were more common on those living in residential homes. Insomnia was significantly associated with younger age and high functional disability in those living in institutions.

At present ageing has become a leading demographic issue in 21st century because of the dramatic change in technology, urbanization, industrialization and changes in health care industry. **(Sr. James Sterling Rose,2002)**

Estimated that 15.57% of older adults experience some form of disturbed sleep for a period of time later in their lives. chronic , sub- clinical average sleep may suppress on older person's immune system. **Senior journal. Com [2002]**

Sleep, a vital ingredient in life, is an active and complex rhythmic state that may be affected by the aging process. Surveys have estimated that more than 50% of community living people age 65 or older experience sleep disturbances. These changes in sleep patterns are reflected in the common sleep-related complaints of older adults, such as taking longer to fall a sleep , awakening more often, and being sleepy in the day time . Sleep disorders can result in tiredness, fatigue, depression , greater anxiety, irritability, pain sensitivity, muscle tremors , immune suppression, and lack of daytime alertness. **(Pandi-Perumal et al. 2002.)**

Music Relaxation Technique has been put forward as a cost-effective and accessible intervention for older adults experiencing symptoms of sleep disturbances, anxiety, depression and distress. Researchers at Stanford University School of Medicine, USA monitored thirty older adults who had been diagnosed with major or minor depressive disorder. The researchers concluded that there was great potential for Music Relaxation Technique as a beneficial intervention especially for homebound elderly people and others who have limited access to health care professionals.

Music Relaxation Technique has been proven to be an effective form of therapy in a variety of areas for a multitude of ailments. However, there is still much more theorizing, discussion, and research that needs to be done in this area, and that fact makes it all the more interesting. Through technological advances and constantly evolving musical styles as well as cross-cultural influences, this is one form of therapy that will never cease to be innovative and topical. Hopefully, researchers will continue to treat this topic as a serious area of psychology and one that deserves to be molded into a more scientific pedagogy through advancement and refinement of research and therapeutic techniques. I believe there is much more to be discovered about music and its effect on humanity.

Primary benefits of music therapy are being completely risk-free, showing cost effective and no side effects. Based on a psycho physiological theory synthesized from literature, sedative music induces relaxation and distraction responses, which reduce activity in neuro-endocrine and sympathetic nervous systems, result in decreased anxiety, heart rate, respiratory rate, blood pressure.

The art of music therapy at the at the present time is the most recent link in an unbroken chain of practices which originated in ancient civilizations such as Egyptian and the more antiquity of the concepts is as it was to people in the ancient work to they too looked to their ancestors for guidance.

STATEMENT OF THE PROBLEM

“A study to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected old age home in Dindigul district”.

OBJECTIVES

- To assess the level of sleep quality before and after music therapy among senior citizens
- To evaluate the effectiveness of music therapy on sleep quality among senior citizens
- To associate the post test level of sleep quality among senior citizens with their selected demographic variables

HYPOTHESES

H₁: There will be a significant difference in sleep quality of senior citizens before and after music therapy at $p < 0.05$ level of significance.

H₂: There will be a significant association between the post level of sleep quality and selected demographic variables at $p < 0.05$ level of significance.

OPERATIONAL DEFINITIONS

Effectiveness

It refers to statistically significant change in the level of sleep quality among senior citizens after music therapy.

Music Therapy

In this study, music therapy refers to administering an instrumental music for 45 minutes using C.D rendered by experts in the field, especially designed for relaxation and sleep.

Sleep Quality

It refers to the oral statement of senior citizens with sleep disturbance regarding sleep pattern during the previous day as measured by Groningen sleep quality scale.

Senior Citizen

Peoples who are at the age of 60 and above who are residing in the selected old age home.

ASSUMPTIONS

- Senior citizens may have poor sleep quality.
- Music therapy may help to improve the sleep quality.

DELIMITATION

- Study is limited to the age group of 60 and above.
- The sample size is limited to 50
- The period of the study was limited to 4 weeks

CONCEPTUAL FRAME WORK

A conceptual frame work is an interrelated concept or abstractions that are assembled together in some rationale scheme by virtue of their relevance to common theme (Polit and Hungler 1995).

The conceptual frame work adopted for this study is J W Kenny's open System Model (1969), It consists of Input, Throughput, Output and feedback. All living systems are open. In which there is a continual exchange of matter energy and information, open systems have varying degree of interaction with the environment from which the system receives input and gives back. Output in the form of matter energy and information for survival. All system must receive varying types and amount of matter, energy and information.

Input

Information, energy or matter that enters a system to work well, Input contribute to achieve the purpose. In this study it refers to samples demographic data, Preparation of Groningen sleep quality scale and conducting pretest.

Throughput

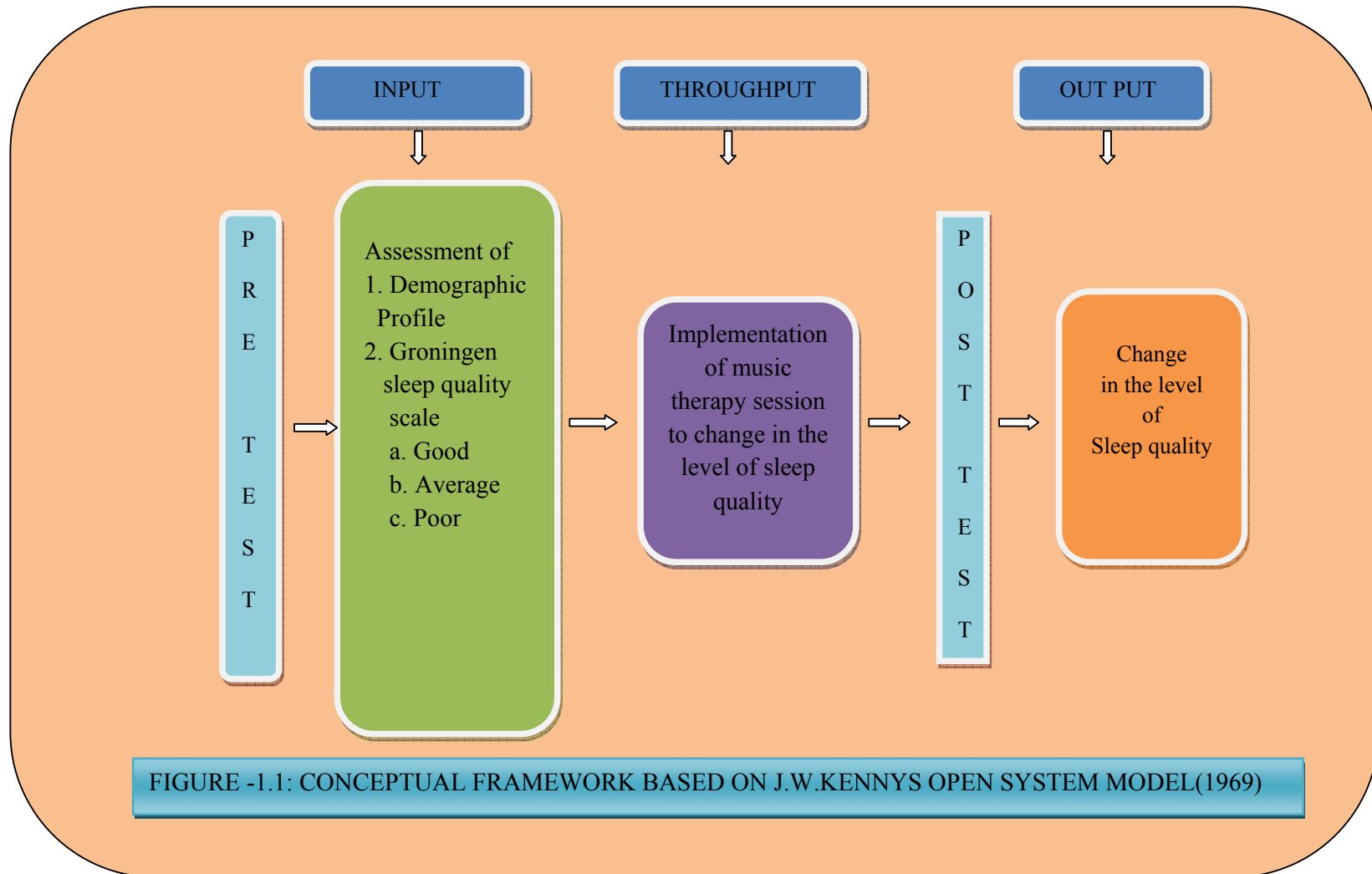
It occurs at the same point between input and out put process which enables the input to be transferred as a output in such a way that it can be readily assessed by the system, Here implementation of music therapy is a throughput.

Output

It refers to the effectiveness of music therapy to change in the level of sleep quality. This information thus acquired could be a feedback to the system.

Feedback:

Information of environment responses to the system's output. So the information thus acquired could be a feedback to the system which could help in maintenance and improvement of the system



CHAPTER-II

REVIEW OF LITERATURE

Reviews are collected on the basis of following headings:

1. Literature related to sleep quality.
2. Literature related to music therapy and sleep quality.
3. Literature related to music therapy on sleep quality among senior citizens.

1. Literature related to sleep quality.

Showrilu V.(2009). conducted a study on correlation study among senior citizens to correlate quality of sleep with quality of life among 100 samples. Modified Pittsburg rating scale and structural interview schedule was used to collect the data for a week. Result showed that there was a positive correlation regarding quality of sleep with quality of life $r = 0.346$, $P < 0.05$, some of the background factors were also found correlated with quality of sleep and quality of life. It was inferred that as the quality of sleep increases, the quality of life increases.

Mesas.AE.et.al, (2009) conducted a study on examine the association between sleep duration and functional limitation in older adults from Spain. It's a Cross-sectional study with 3,708 individuals representative of the non-institutionalized population aged ≥ 60 years. Sleep duration was self-reported, and the functional limitations in the instrumental activities of daily living (IADL) were assessed. The results say that Functional limitations in IADL were identified in 1,424 (38.4%) participants. In sociodemographic and lifestyle variables, the percentage of participants with limitation in IADL was higher in those who slept ≤ 5 hours (odds ratio [OR]=1.56; 95% confidence interval [CI]=1.18-2.06) or ≥ 10 hours (OR=2.08; 95%CI=1.67-2.60; p for trend <0.001) than in those who slept 8 hours. The association

between long sleep (≥ 10 hours) and functional limitations held even after adjustment for comorbidity and sleep quality (OR=1.77; 95%CI=1.38-2.28) while the association between short sleep (≤ 5 hours) and functional limitation no longer held after this adjustment (OR=1.10; 95%CI=0.80-1.50). Researcher concluded that In older adults, long sleep duration is a marker of functional limitations independent of co morbidity.

Engedal K. (2009). conducted a study on to examine psychological distress in older people receiving home nursing care at University of Agder, Kristiansand, Norway. A linear regression analysis was applied in a cross-sectional sample of 214 patients aged 75 years and older. Psychological sleep disturbances was measured using the General Health Questionnaire (GHQ). 23 (10.7%) reported experiencing sleep disturbances using a cutoff point of 4 or more on a GHQ case score. Commonly reported risk factors such as sex, household composition and perceived social support, and objective measures of somatic and mental health and bodily dysfunctions were not related to sleep disturbances. Suggested reasons for this are greater acceptance of bodily and functional shortcomings and of changes related to goal achievement in old age.

Wilksy.et.al, (2008). conducted a study on randomized controlled trial to improve abnormal sleep/wake patterns in nursing home residents by testing multidimensional, non pharmacological intervention. Residents were screened for excessive day time sleep and night time sleep disturbance. 492 two residents were screened, 339 had excessive daytime sleeping. Among these 133 had night time sleep disruption and were consented to participate, 120 completed baseline assessments 118 were randomized to intervention versus usual care. 5 consecutive days and nights of efforts were taken to decrease during day. The strategies were 30 minutes or more of

daily sunlight exposure, increased physical activity, structured bed time routine, and efforts to decrease night time noise and light. Results showed that there was significant decrease in day time sleeping in participants in intervention, with no change in controls. There were no significant effects on percentage of night time awakenings. Result concluded that, the main effect may be a significance decrease in day time sleeping, which may translate to an improvement in quality of life

Sanatombi Devi E. (2007). conducted a study on a selected area of Udupi, to determine the perceived sleep disturbances experienced by elderly clients above the age of 60 years living with their family members. There were 100 participants from Udhavara village and the tool was modified shrivastava social economic status scale and the structured questionnaire used. Association between perceived sleep disturbances feelings and selected variables was done. Among these findings there was significant relationship between age, sex and education with perceived sleep disturbances feelings. The results revealed that (37.5%) had mild sleep disturbances, (55%) had moderate sleep disturbances and (7.5%) had poor sleep disturbances. Hence a significant relationship was found between the family relationships and perceived sleep disturbances of the elderly clients.

White K, Rooksby K. (2007). An explorative study was conducted on to describe the experiences of sleep disturbances of 12 older people from Australian residential aged care facilities at School of Nursing, Midwifery and Postgraduate Medicine, in Western Australia. A measure of fatigue was assessed from stage one findings, with reference to the literature. In stage two of the study, the Frail Elder sleep disturbances Assessment Tool was subjected to panel review, piloting, and refinement. The refined tool comprises 20 items in three subscales: Sleep disturbances

effects; sleep disturbances resources; and adaptation to disturbances of sleep. Further work is required to establish the tool's psychometric properties, but it should then be useful for both research and clinical assessment purposes.

Kang SY. (2006). conducted a study on to examine the association between acculturation depression and sleep disturbances symptoms in a regional probability sample (n = 407) of 6 groups of Asian immigrant elders at Columbia University, USA. Findings suggest that about 40 percent of the sample were sleep disturbances, indicating higher sleep disturbances rates than found in other studies of Asian elderly samples in the United States and Asia. Multiple regression analyses indicated that acculturation depression caused by elders' perception of a cultural gap between themselves and their adult children was associated with high sleep disturbances levels. Data suggests that sleep disturbances is prevalent among urban Asian immigrant elders and that there is great heterogeneity among Asian ethnic subgroups.

Vidhya J. and Josephine S.P. (2009). conducted a study on to assess the level of sleep quality among senior citizens in selected rural community in Bangalore. A descriptive design was adopted and total 150 samples were recruited. The subjects were interviewed and the data was recorded on sleep quality. The result of the study signifies that the percentage of good sleep (50.7%) was found, average sleep 81% and poor sleep 88% were found to be satisfactory. Though the overall scores of sleep quality revealed 60.7% as good, but still 39.9% of the senior citizens were at risk of fall. The study concludes that the risk of fall is more among the age group of 65 years and above

Irwin et.al. (2008) A study was conducted on, among 32 residents of three skilled nursing homes to document the nature of the stressors they experienced and the coping mechanisms they used. The design used for this study was the one-shot case study. The sample comprised 26 (81%) women. Of the participants, 41% were 85 years or older, 31% were 75 to 84 years, and 28% were 74 years and younger. The findings indicated that medical issues were the most common stressors. The most common coping responses were prayer, reading, watching television, listening to music, and talking to friends and family. The result shows that music has a major role in coping mechanism used by elder people

Ajisha. (2008). study was conducted, to assess the stress, coping strategies and quality of life of institutionalized and non-institutionalized elderly in Kottayam district, Kerala. Data used in this study were collected from an old age home and a village in Kottayam with sample of 150 respondents aged 60 or older. The survey used different tools such as socio-demographic proforma for institutionalized and non-institutionalized elderly, stress rating scale, a coping inventory, and WHOQOL-BREF scale. The study reveals that institutionalized elderly have more stress and less quality of life compared to non-institutionalized ones.

Rakesh. (2005). A study was conducted, to assess the emotional problems among 50 elderly people in a selected old age home at Kolar District. Study revealed that most of the respondents (54 %) were between the age group of 60-70 years, 32% between 71-80 years and remaining (14%) above 80 years. Most of the respondents (68%) were male and 32% of them were females. Majority 80% of the subjects were suffering with major health problems. There was a association between sex and

emotional problems of elderly people, there was significant association between emotional problems and general health status of elderly people.

Susma S. (2004). A study conducted to assess the level of mental health among the residents in an old age home at Calcutta, India. Out of total of 60 residents, 26.6% had very poor mental health level and majority 48.3% had a poor level of mental health. The same study revealed the main psychological problem among old age home residents. Frustration was experienced by 67.2%, feeling of insecurity was experienced by 76.4% and loneliness by 54%. The majority 76.6% of the subjects were females and the commonest reason for 40% of them joining in the old age home was “not to be a burden of family members”.

Godwin. (2001). A comparative study conducted on the emotional well-being of senior citizens staying in old age home versus senior citizen staying with family, the sample of the study consisted of 120 male and female senior citizens out of which 60 from old age home and 60 residing in family. Findings of the study showed that maximum (90%) of the senior citizens from old age home are under borderline emotional well-being (61 – 80%), 05% of them under negative emotional well-being (40-60) and rest 05% of them under positive emotional well-being (81-100), whereas among senior citizens staying with family, 92% are under positive emotional well-being and 08% are under border life emotional well being.

Chai Shana. (2001). A study was conducted on living status and psychological well-being in later life among 205 Chinese aged 60 years or over were recruited. Life satisfaction and depression were measured. Result suggest that, although living alone is a risk factor for depression in old age, its negative effect can

be reduced or even eliminated when downward social comparison is practiced. Result showed that participants living alone were more depressed than those living with someone.

2. Literature related to music therapy and sleep quality

Eckert K. (2009). A comparative study was conducted by Smith C, Hancock H, Blake-Mortimer J, Eckert K. on music therapy` and relaxation to induce sleep disturbances. The study intended to determine if either of the modality induced the subjects` sleep, anxiety, blood pressure, and improved quality of life. The sample comprised of 131 subjects with mild to moderate level of stress recruited from South Australia. The subjects were given ten weekly 1 hour sessions of relaxation of music. The findings showed that following 10 week intervention, sleep, anxiety and quality of life score improved over time. music was more effective than relaxation in improving mental health.

Winbush NY, Gross CR, Kreitzer MJ. (2007). conducted a study on sleep can be improved by mindfulness-based stress reduction (MBSR) in Department of Family Medicine and Community Health, University of Minnesota, USA. MBSR was reported that pre intervention and post intervention measures of sleep quality or duration. 38 articles were identified for review. 7 met inclusion criteria. Lack of standardized outcome measures precluded pooling of results for quantitative data analysis. Sleep report measures varied (standardized scales, single item, and sleep diaries). 4 studies (all uncontrolled) found that MBSR significantly improved measures of sleep quality or duration. Controlled studies have not clearly demonstrated the positive effects of MBSR on sleep quality and duration. However, there is some evidence to suggest that increased practice of *MBSR* technique is

associated with improved sleep and the participants experience a decrease in sleep-interfering cognitive processes (e.g. worry or tension).

Morone NE, Greco CM, Weiner DK. (2008). conducted a study on to assess the feasibility of an 8 session relaxation music program for community-dwelling older adults with sleep disturbances and to develop initial estimates of treatment effects at USA. It was designed as a randomized, controlled clinical trial. Participants were 37 community-dwelling older adults aged 65 years and older with sleep disturbances of moderate intensity occurring daily or almost every day and an 8-week relaxation music program or to a wait-list control group. 8-week and 3-month follow-up measures of sleep, physical function, and quality of life were assessed. 89 older adults were screened and 37 found to be eligible and randomized within a 6-month period. They music an average of 4.3 days a week and the average minutes per day was 31.6. Compared to the control group, the intervention group displayed significant improvement in the sleep quality Questionnaire. This study concludes that an 8-week relaxation music program is feasible for older adults with sleep disturbances. The program may lead to improvement in sleep pattern.

Weiner DK. (2008). conducted a study on to identify the effects of relaxation music program on older adults with chronic sleep disturbances at Department of Medicine, Division of General Internal Medicine, University of Pittsburgh, Pennsylvania; a qualitative study based on grounded theory was used. Participants were 27 adults \geq 65 years of age with sleep disturbances of at least moderate severity and of at least 3 months duration. It was found that several themes reflecting the beneficial effects of relaxation music on attention, sleep, and achieving well-being. A number of participants reported improved sleep latency as well as quality of

sleep. Participants described achieving well-being during and after a relaxation music therapy session that had immediate effect on mood elevation but also long-term global effect on improved quality of life and non-pharmacologic treatment of sleep disturbances for older adults. This study concludes that Community-dwelling older adults with sleep disturbances experience numerous benefits from relaxation music including 1 improved attention, better sleep, enhanced well-being, and improved quality of life³⁴.

Norlander T, Saatcioglu F. (2007). conducted a study on level of sleep quality through a comprehensive relaxation music program on 103 older adults from a small university, city of Sweden. The subjects were instructed in a 6-day intensive program of Sudarshan kriya and related practices (SK & P) which they practiced daily for six weeks. The study found that the participants in SK & P group higher their degree sleep disturbances, depression and stress, and also increased their degree of optimism (ANOVA; $P < 0.001$). The participants in music therapy experienced the practice as a positive event that induced beneficial effect. The study suggests that older adult participants may improve their wellness by learning and applying a program based on music therapy.

Manjunath, N.K. Telles S. (2005). conducted a study on Influence of music therapy on self-rated sleep in a geriatric population, at Swami Vivekananda Yoga Research Foundation, Bangalore, India. Of the 120 residents from a home for the aged, 69 were stratified based on age (5 year intervals) and randomly allocated to 3 groups i.e., music therapy. The groups were evaluated for self assessment of sleep over a 1 week period at baseline, and after three and 6 months of the respective interventions. This study revealed that, the music therapy group showed a significant

decrease in the time taken to fall asleep (approximate group average decrease: 10 min, $P < 0.05$), an increase in the total number of hours slept (approximate group average increase: 60 min, $P < 0.05$) and in the feeling of being rested in the morning based on a rating scale ($P < 0.05$) after 6 months. The other groups showed no significant change. This study concludes that Yoga practice improved different aspects of sleep in a geriatric population.

Luskin FM, et. al, (2000). A comprehensive study conducted on complementary and alternative treatments, specifically mind/body techniques, and on musculoskeletal disease was conducted at Stanford University, USA. The goals of the review were to establish a comprehensive literature review and provide a rationale for future research carrying the theme of "**successful ageing.**" Computerized searches were conducted using MEDLINE, PsychInfo, Stanford Library, Dissertation Abstracts, Lexus-Nexus, the Internet as well as scheduled interviews conducted with practitioners and the elderly. Mind/body practices evaluated were: social support, cognitive-behavioral therapy, meditation, the placebo effect, imagery, visualization, spiritual/energy healing, music therapy, hypnosis, yoga, tai chi, and qigong. This study concludes that Mind/body techniques were found to be efficacious primarily as complementary treatments for musculoskeletal disease and related disorders, clinical observation, as well as the cost effectiveness and lack of side effects.

3. Literature related to music therapy on sleep quality among senior citizens.

Josephine S.P. (2009). conducted a study on ,A randomized controlled trial study was conducted in Taiwan on the effectiveness of music on sleep quality of elderly with a two group repeated measures design. Sixty people aged 60 - 83 years with difficulty in sleeping were recruited and screened using

Pittsburgh Sleep Quality Index (PSQI) and Epworth Sleepiness Scale. Participants listened to their choice among six 45 – minute sedative music tape at bed time for three weeks. The results reported significantly better components of sleep quality; better preserved sleep quality, longer sleep duration, greater sleep efficiency, shorter sleep latency, less sleep disturbance and less day time dysfunction ($P=0.04 - 0.001$). Sleep improved weekly, indicating a cumulative dose effect.

Greco CM. (2008). study conducted in United States on the effectiveness of music for sleep disturbance in 25 elderly participants with difficulty in sleeping, were given classical and new age music to listen to before bedtime and whenever a sleep disturbance was identified. The participants were asked to keep daily records to assess the efficacy of the music in inducing sleep. Result of the study reported that 24 (96%) of the participants reported improved sleep after listening to the music. These results demonstrated that music therapy procedure is effective in sleep disturbance among elderly.

Kreitzer MJ. (2007). conducted a study on, An experimental study on the effects of background music on quality of sleep in elementary school children was conducted in Taiwan. Convenience sampling was used to recruit a total of 86 students (43 boys and 43 girls) from an elementary school. Subjects were randomly assigned to the experimental groups ($n = 45$) and the control group ($n= 41$). Subjects in the experimental group were given a 45 - minute CD of music at naptime everyday and bedtime each night for 3 consecutive weeks. Sleep quality was measured using the Pittsburgh Sleep Quality Index (PSQI) at pre – test and 3 weekly post - tests. Results showed that subjects who received

background music had significant improvement in global sleep quality over time. Improvements were also observed in all 6 components of the PSQI although significant improvements were only observed in sleep duration and sleep efficiency.

N.K. Telles. (2007). A study was conducted to explore the effect of a music therapy procedure on the reduction of anxiety and improvement of sleep patterns in abused women in shelters. 28 women residing in 2 domestic violence shelters in a Midwestern city met with the researcher on 5 consecutive days for half - hour sessions. A pre-test – post-test design with control and experimental groups was used. The dependent variables included: anxiety measured by the STAI before and after each music stimulus, sleep quality as measured by the PSQI on the first and last sessions, and levels of fatigue as measured by the Fatigue Scale at waking time. The independent variable was a 20 – minute recording of music with a Progressive Muscle Relaxation script. Results indicated that music therapy constituted an effective method for reducing anxiety levels and a significant effect on sleep quality. These results demonstrate that music therapy procedure is effective on the reduction of anxiety and improvement of sleep patterns.

Kjellgren A. (2006). An experimental study was conducted in USA to determine the effects of second and third day postoperative music interventions (music, music video) on pain and sleep in 96 postoperative patients having CABG surgery. The McGill Pain Questionnaire (MPQ) was administered. Pain decreased from Day 2 to Day 3 for all three groups. For the evaluative component of pain, those in the music group had significantly ($F [2, 93] =$

4.74, $p < .05$) lower scores on postoperative Day 2 than the rest period control group. Effects of the intervention on sleep as measured by the Richard Sleep Questionnaire indicated that the video group had significantly ($F [2, 92] = 3.18, p < .05$) better sleep scores than the control group on the third morning.

Hoekert. et, al. (2006). A study was conducted to assess the effectiveness of Individualized music on the frequency of agitation in elderly person with dementia. Confusion and agitation in elderly patients are crucial problems. This study Tested Gardner's mid-range theory of individualized music intervention for agitation. The intervention was carried out using a semi experimental pre test and post test study. The sample consisted of 30 women and 9 men (mean age 82 years) with severe cognitive impairment. Baseline data were collected for 3 weeks. Findings from the Modified Hart sock Music Preference Questionnaire guided the selection of individualized music. Group A ($n=16$) received individualized music for 4 weeks. Music interventions were presented for 30 minutes, two times per week. Independent and dependent test was used to analyze the data obtained from the Modified Cohen-Mansfield Agitation Inventory. The study concluded that the individualized music is effective in reducing agitation in elderly persons with dementia.

Lai H.-L. & Good M. (2005). conducted a study on, Music improves sleep quality in senior citizens. The aim of this paper is to report an investigation of the effects of soft music on sleep quality in older community-dwelling men and women in Taiwan. Background. Sleep is a complex rhythmic state that may be affected by the ageing process. Few studies have focused on the effects of music, a non-pharmacological method of improving the quality of sleep in older adults. A randomized controlled trial was used with a two-group repeated measures design.

Sixty people aged 60–83 years with difficulty in sleeping were recruited through community leaders and screened using the Pittsburgh Sleep Quality Index (PSQI) and Epworth Sleepiness Scale. Those reporting depression, cognitive impairment, medical or environmental problems that might interfere with sleep; and those who used sleeping medications, meditation, or caffeine at bedtime were excluded. Participants listened to their choice among six 45-minute sedative music tapes at bedtime for 3 weeks. There were five types of Western and one of Chinese music. Sleep quality was measured with the PSQI before the study and at three weekly post tests. Groups were comparable on demographic variables, anxiety, depressive symptoms, physical activity, bedtime routine, herbal tea use, napping, pain, and pretest overall sleep quality.

Morin. et, al. (2004). The study was to assess the effectiveness of soft music for treatment of anxiety and depressive disorder inpatients in Kaohsiung City, Taiwan. A pretest-posttest with a two-group repeated measures design was used. Patients with anxiety and depressive disorder were recruited through referred by the psychiatric physicians. Subjects listened to their choice of music for 2 weeks. Anxiety and Depression was measured with the Zung's Anxiety and Depression Scale before the study and at two weekly post tests. Using repeated measures ANCOVA, music resulted in significantly better anxiety and depressive scores, as well as significantly better subscores of depression compared with controls. Anxiety and Depression improved weekly, indicating a cumulative dose effect. The findings provide evidence for psychiatric nurses to use soft music as an empirically based intervention for anxious and depressed inpatients.

Haesler. et, al. (2003). conducted a study on, The purpose of this study was to identify individual musical preferences, investigate the relationship between an individual's musical preferences and demographic variables, and examine the effects of the selected music on relaxation. Fifty healthy subjects (mean age 65.7; SD = 5.2) from the community participated in the study. Musical preference interviews and relaxed responses to selected music were administered to the study participants individually in the investigator's office. Participants' heart rates, respiratory rates, and finger temperature were measured before they listened to the introductory tape and again after they listened to the selected music for 20 minutes. The participants were asked to judge how much they liked the 6 types of soothing music and were asked to rate it on a scale. The results indicated that Chinese orchestral music was the preferred choice, followed by harp, piano, synthesizer, orchestral, and finally slow jazz. There were no differences among types of music on relaxation, and no significant differences between musical preference and any demographic variables. The heart rates and respiratory rates of the participants were significantly lower ($t = 21.24, P < .001$ and $t = 20.09, P < .001$, respectively). Finger temperature ($t = -33.20, P < .001$) raised significantly after listening to the selected music. These findings suggest that soothing music selections have beneficial effects on relaxation in community-residing elderly people.

CHAPTER –III

RESEARCH METHODOLOGY

This chapter explains the research methodology adapted to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected old age home in Dindigul district.

Research Approach

Quantitative evaluative approach was used in this study.

Research Design

Pre experimental design with one group pre test and post test was used.

$O_1 \quad X \quad O_2$

O_1 : Pre assessment on level of sleep quality

X: Music therapy

O_2 : Post assessment on level of sleep quality

Variables

Independent variable: Music therapy

Dependent variable : Sleep quality

Description of Setting:

The Setting of the Main study was conducted in Anbalaya old aged home in Dindigul, which is located 70 km away from Sara Nursing College . The old aged home is a 100 bedded Home at Dindigul. 57 elderly people were residing, they have facilities like water, food, sanitation, electricity and leisure time enjoyment. Relatives visited to the home daily.

Population

Target Population of this study was senior citizens.

SAMPLING:**Sample**

Senior citizens who met the inclusion criteria.

Sample Size:

Sample size was 50 senior citizens residing in selected old age home at Dindigul.

Sampling Technique:

Convenience sampling technique was used to select the Sample.

Criteria for Sample Selection

The samples were selected based on the following inclusion and exclusion criteria.

Inclusion criteria:

- Senior citizens in the age group of 60 and above.
- Senior citizen who are willing to participate in this study.
- Senior citizen who can speak and understand Tamil and English.

Exclusion criteria:

- Senior citizen with sensory deficit

RESEARCH TOOL AND TECHNIQUE

The data collection tool consist of two section

Section A: Demographic profile of senior citizens

It comprised of demographic data of the senior citizens such as age, sex, religion, education, previous occupation, monthly income, marital status, type of family, food habits and source of income.

Section B: Groningen sleep quality scale

It helps to assess the sleep quality of the senior citizens, which has 15 items to measure the quality of sleep. The scale was translated in Tamil. The accuracy of the translation was confirmed by back translation. The first question does not count for the total score. One point was awarded if the answer is true to the item numbers 2,3,4,5,6,7,9,11,13,14 and 15 and zero was given if it is false. For item numbers 8, 10, 12 reverse scoring has been given. The total possible score was 15. The total score of each subject was calculated and interpreted as follows;

1 – 2 : Good sleep

3 – 5 : Average sleep

6 – 15 : Poor sleep

CONTENT VALIDITY:

Groningen sleep quality scale was developed by the investigator based upon the review of literature, the tool was evaluated by 5 experts(3 From the department of Psychiatric nursing,1 from Psychiatrist and 1 from Psychologist). The suggestions given were incorporated.

RELIABILITY

To ensure the reliability of the tool it has been applied for 5 senior citizen who met the inclusion criteria. Reliability of the Groningen sleep quality scale was established by Test – re test method and the Reliability was $r=0.08$.

PILOT STUDY

In order to test the feasibility and the practicability. The Pilot study was conducted at Grace home at Oddanchatram for a period of one week 15-06-11 to 21-06-11 among 5 senior citizens. The study was found feasible to conduct.

METHOD OF DATA COLLECTION

Ethical consideration

A formal consent was obtained from the administrator of old age home and the oral consent was obtained from the subjects. Assurance was given to the subjects regarding the confidentiality of the data and anonymity was maintained throughout the study.

Period of data collection

The main study was conducted in Anbalaya old aged home at Dindigul for 4 weeks from 29.06.2011 to 28.07.2011.

Data collection procedure

Before conducting the main study, the researcher met the concerned authorities in the Anbalaya old aged home in Dindigul and obtained the permission for the data collection. The data collection was done after explaining the procedure to senior citizens and with their oral consent. The senior citizens who met the inclusion criteria were selected by convenience sampling technique.

In the 4 weeks of data collection, each two weeks 25 patients were selected. The data collection was done in the evening 6.30 to 9.30 pm. In the pre test the sleep quality was assessed by Groningen sleep quality scale. The next day, the music therapy was provided to the samples for 30-45 minutes through head phone for 14 days using the relaxation music. After completion of the intervention, the post test was conducted and the score was interpreted.

DATA ANALYSIS

The descriptive statistics was used for categorical data, Paired 't' test was used to evaluate the effectiveness of music therapy on sleep quality and Chi square was used to find out the association between the post test level of sleep quality and selected demographic variables.

CHAPTER- IV

ANALYSIS AND INTERPRETATION

Analysis is the process of organizing and synthesizing the data in such a way, that question answered the hypothesis (**polit,D,F.Huggler 2003**).

This chapter deals with analysis and interpretation of data to evaluate the effectiveness of music therapy on sleep quality among senior citizens in selected old age home at Dindigul Dist.

The data analysis is presented as following sections:

Section- A: Distribution of samples according to their demographic variables.

Section- B: Distribution of samples according to their Level of sleep quality before and after Music therapy.

Section- C: Effectiveness of Music therapy on sleep quality among senior citizens

Section- D: Association between the post test level of sleep quality and selected demographic variables

SECTION: A

Table-4.1: Distribution of samples according to their demographic Variables.

n=50

Sl. No	Demographic Variables	f	%
1	Age (In Years)		
	a) 60 – 65 years	5	10
	b) 66 – 70 years	30	60
	c) 71 – 75 years	10	20
	d) 76 – 80 years	5	10
2	Sex		
	a) Male	14	28
	b) Female	36	72
3	Religion		
	a) Christian	3	6
	b) Hindu	46	92
	c) Muslim	1	2
4	Education		
	a) No formal Education	32	64
	b) Primary Education	10	20
	c) Higher Secondary Education	5	10
	d) Graduate	2	6
5	Previous Occupation		
	a) Un Employee	2	4
	b) Private Job	20	40
	c) Government Service	15	30
	d) Business	8	16
	e) Self Employees	5	10
6	Income		
	a) Below Rs.1,000	-	-
	b) Rs.1,001 – Rs. 3,000	12	24
	c) Rs. 3,001 – Rs. 4,000	28	56
	d) Above 4,000	10	20

7	Marital Status		
	a) Married	47	94
	b) Unmarried	2	4
	c) Divorced	-	-
	d) Widow / Widower	1	2
8	Type of Family		
	a) Nuclear Family	36	72
	b) Joint Family	14	28
	c) Extended Family	-	-
9	Food Habits		
	a) Vegetarian	9	18
	b) Non Vegetarian	41	82
10	Source of Income		
	a) Home	30	60
	b) Pension	15	30
	c) Other association	5	10

Table 4.1. shows that, majority of the subjects , 30 (60%) of the subjects were between 60-65 years of age, 36 (72%) of the subjects were Female. Considering their Religion, 46 (92%) of the subjects were Hindu, 32(64%) had no formal education, 28(56%) of them had Rs.3000-4000 as their Monthly income, 47(94%) of them married, 36 (72%) of them belongs to Nuclear family, 41(82%) were non-vegetarian, and 30(60%) of them has their source of income from home.

SECTION-B

Distribution of samples according to their Level of sleep quality before and after Music therapy. **n=50**

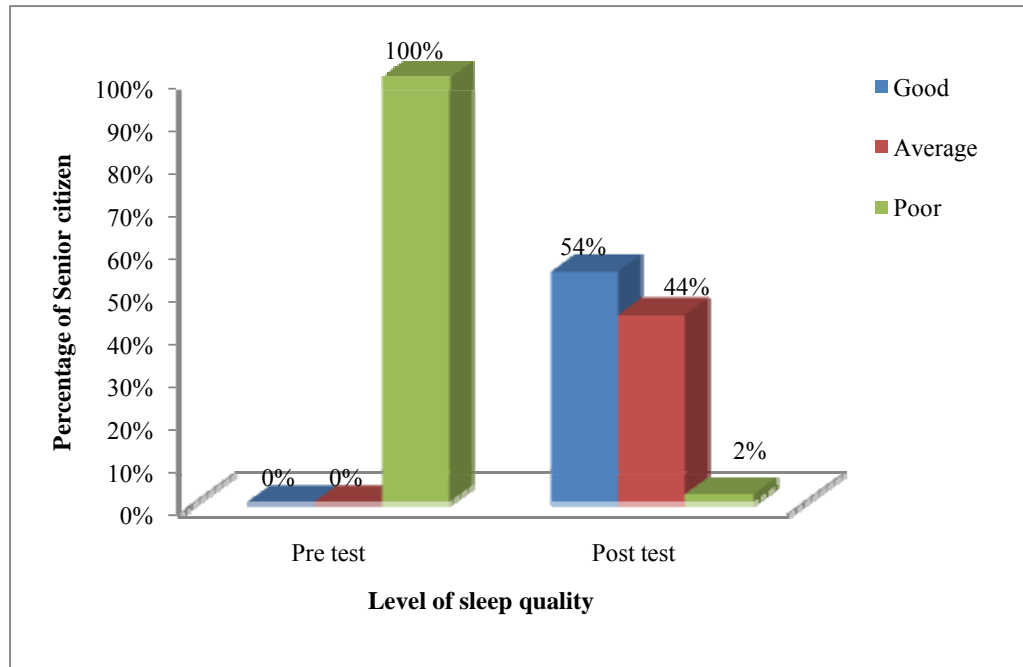


Figure-4.1: Distribution of samples according to their Level of sleep quality before and after Music therapy.

The Figure:4.1 shows that, In pre test 50(100%)had poor sleep, Where as in post test 27(54%) had Good sleep, 22(44%) subjects had Average sleep and 1(2%) had poor sleep after the music therapy.

SECTION: C

Table- 4:2: Effectiveness of Music therapy on sleep quality among senior citizens

n=50

S. No	Variables	Maximum Score	Pre test		Post test		Mean difference	't' Value	df
			Mean	SD	Mean	SD			
1	Sleep Quality	15	10.5	1.72	3.02	1.78	7.48	20.7*	49

(*p<0.05)

Table 4.2, Shows that, the mean pretest score (10.05(±1.72)) and post test score (3.02(±1.78)) respectively. The 't' value (20.7) is greater than the Table value (2.132) at p<0.05 level of significance. Hence the music therapy is more effective in changing the level of sleep quality.

SECTION D

Table-4.3: Association between level of sleep quality and their selected demographic variables

n=50

S. No	Demographic variables	Level of sleep quality						Chi square
		Good sleep		Average sleep		Poor sleep		
		f	%	f	%	f	%	
1.	AGE: 60-65 yrs 66-70yrs 71-75yrs 76-80yrs	5 20 2 0	10% 40% 4% 0	0 10 8 4	0 20% 16% 8%	0 0 0 1	0 0 0 2%	23.46*
2.	GENDER: Male Female	10 17	20% 34%	4 18	8% 36%	0 1	0 2%	8.6*
3.	RELIGION: Christian Hindu Muslim	3 24 0	6% 48% 0	0 21 1	0 42% 2%	0 1 0	0 2% 0	3.89
4.	EDUCATION: No formal education Primary education Higher secondary Graduates	15 5 5 2	30% 10% 10% 4%	17 5 0 0	34% 10% 0 0	0 0 0 1	0 0 0 2%	21.00*
5.	PREVIOUS OCCUPATION: Un employee Private job Government service Business Self employee	2 9 8 4 4	4% 18% 16% 8% 8%	0 11 7 3 1	0 22% 14% 6% 2%	0 0 0 1 0	0 0 0 2% 0	3.91

6.	MONTHLY INCOME							
	Below Rs.1000	0	0	0	0	0	0	5.40
	Rs.1001-3000	8	16%	4	8%	0	0	
	Rs.3001-4000	15	30%	12	24%	1	2%	
	Above 4000	4	8%	6	12%	0	0	
7.	MARITAL STATUS:							
	Married	27	54%	20	40%	0	0	26.47*
	Unmarried	0	0	0	0	0	0	
	Divorced	0	0	1	2%	1	2%	
	Widow/ widower	0	0	1	2%	0	0	
8.	TYPE OF FAMILY:							
	Nuclear	19	38%	17	34%	0	0	2.90
	Joint	8	16%	5	10%	1	2%	
	Extended	0	0	0	0	0	0	
9.	FOOD HABITS							
	Vegetarian	6	12%	3	6%	0	0	0.82
	Non vegetarian	21	42%	19	38%	1	2%	
10.	SOURCE OF INCOME							
	Home	16	32%	13	26%	1	2%	1.3
	Pension	9	18%	6	12%	0	0	
	Other association	2	4%	3	6%	0	0	

(* p< 0.05)

The table 4.3 shows that , There was a significant association (P<0.05) found between the level of sleep quality and age, gender, education and marital status.

CHAPTER-V

RESULTS AND DISCUSSION

This chapter presents the interpretation to the statistical findings. It has been discussed based on the objectives of the study. The aim of the study was to find the effectiveness of music therapy on sleep quality among senior citizens in a selected old age home at Dindigul District. The present study was conducted in Anbalaya old aged home at Dindigul, A sample of 50 Patients with any type of sleep disturbance who met inclusion criteria were selected for the study by using convenience sampling method and The total period of data collection was 4 weeks, each two weeks 25 patients were selected, the data collection procedure was explained to the subjects, after that data was collected for 30-45 minutes.

The first objective of the study was to assess the level of sleep quality before and after music therapy among senior citizens.

Among 50 subjects before the music therapy, In pre test 50(100%) had poor sleep, Where as in post test 27(54%) had Good sleep, 22(44%) subjects had Average sleep and 1(2%) had poor sleep after the music therapy.

The study was supported to **Josephine S.P. (2009)** conducted a study on ,A randomized controlled trial study was conducted in Taiwan on the effectiveness of music on sleep quality of elderly with a two group repeated measures design. Sixty people aged 60 - 83 years with difficulty in sleeping were recruited and screened using Pittsburgh Sleep Quality Index (PSQI) and Epworth Sleepiness Scale. Participants listened to their choice among six 45 – minute sedative music tape at bed time for three weeks. The results reported

significantly better components of sleep quality; better preserved sleep quality, longer sleep duration, greater sleep efficiency, shorter sleep latency, less sleep disturbance and less day time dysfunction ($P=0.04 - 0.001$). Sleep improved weekly, indicating a cumulative dose effect.

The second objective of the study was to evaluate the effectiveness of the music therapy on sleep quality among senior citizens.

In the pre test before the music therapy, the mean pretest score ($10.05 (\pm 1.72)$) and post test score ($3.02 (\pm 1.78)$) respectively. The 't' value (20.7) is greater than the Table value (2.132) at $p < 0.05$ level of significance. Hence the music therapy is more effective in changing the level of sleep quality.

H₁: There will be a significant difference in sleep quality among senior citizens before and after music therapy at $p < 0.05$ level of significance.

Therefore Hypothesis 1 was accepted.

The study was supported to **Morone NE, Greco CM, Weiner DK.(2008)** conducted a study on to assess the feasibility of an 8 session relaxation music program for community-dwelling older adults with sleep disturbances and to develop initial estimates of treatment effects at USA. It was designed as a randomized, controlled clinical trial. Participants were 37 community-dwelling older adults aged 65 years and older with sleep disturbances of moderate intensity occurring daily or almost every day and an 8-week relaxation music program or to a wait-list control group. 8-week and 3-month follow-up measures of sleep, physical function, and quality of life were assessed. 89 older adults were screened and 37 found to be eligible and randomized within a 6-month period. They music an average of 4.3 days a week and the average minutes per day was 31.6. Compared to the control group, the intervention group

displayed significant improvement in the sleep quality Questionnaire. This study concludes that an 8-week relaxation music program is feasible for older adults with sleep disturbances.

The third objective of the study was to associate the post level of sleep quality among senior citizens with their selected demographic variables.

Chi-square analysis was done to find the association between the post test level of sleep quality and the selected demographic variables. There was a significant association ($P < 0.05$) found between the level of sleep quality and age, gender, education and marital status.

H₂: There will be significant association between post level of sleep quality with their selected demographic variables at $p < 0.05$ level of significance.

Therefore, Hypothesis 2 was supported.

The study was supported to **Greco CM, (2008)** study conducted in United States on the effectiveness of music for sleep disturbance in 25 elderly participants with difficulty in sleeping, were given classical and new age music to listen to before bedtime and whenever a sleep disturbance was identified. The participants were asked to keep daily records to assess the efficacy of the music in inducing sleep. Result of the study reported that 24 (96%) of the participants reported improved sleep after listening to the music. These results demonstrated that music therapy procedure is effective in sleep disturbance among elderly.

Summary

The chapter dealt with discussion of the study with reference to the objectives the supportive studies according the three objectives have been obtained and the two hypothesis were retained in this study.

CHAPTER- VI

SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATION AND RECOMMENDATIONS

In this chapter, summary, conclusion, implications to nursing practice and recommendations for further study are presented.

This study was undertaken to evaluate the effectiveness of music therapy on sleep quality among senior citizens at selected old age home in Dindigul district, conceptual frame work study was based on is J W Kenny's open System Model (1969), It consists of Input, Throughput, Output and feedback. The researcher met the concerned authorities in the Anbalaya old aged home in Dindigul and obtained the permission for the data collection. The data collection was done after explaining the procedure to senior citizens and with their oral consent. The senior citizens who met the inclusion criteria were selected by convenience sampling technique.

In the 4 weeks of data collection, each two weeks 25 patients were selected. The data collection was done in the evening 6.30 to 9.30 pm. In the pre test the sleep quality was assessed by Groningen sleep quality scale. The next day, the music therapy was provided to the samples for 30-45 minutes through head phone for 14 days using the relaxation studies. The post test was conducted and the score was interpreted.

MAJOR FINDINGS OF THE STUDY

The major findings of the study was summarized as follows,

Among 50 samples, the major findings of the study were majority of the subjects , 30 (60%) of the subjects were between 60-65 years of age, 36 (72%) of the

subjects were Female. Considering their Religion, 46 (92%) of the subjects were Hindu, 32(64%) had no formal education, 28(56%) of them had Rs.3000-4000 as their Monthly income, 47(94%) of them married, 36 (72%) of them belongs to Nuclear family, 41(82%) were non-vegetarian, and 30(60%) of them has their source of income from home.

In pre test 50(100%)had poor sleep, Where as in post test 27(54%) had Good sleep, 22(44%) subjects had Average sleep and 1(2%) had poor sleep after the music therapy.

In the pre test before an music therapy, the mean pretest score (10.05(+1.72)) and post test score (3.02(+1.78)) respectively. The 't' value (20.7) is greater than the Table value (2.132) at $p < 0.05$ level of significance. Hence the music therapy is more effective in changing the level of sleep quality.

There was a significant association ($P < 0.05$) found between the level of sleep quality and age, gender, education and marital status.

NURSING IMPLICATIONS

The findings of this study had implications in various areas of nursing i.e., nursing practice, education, research and administration.

Nursing Practice

- Psychiatric nurses should play an vital role in understanding the psychological problems of the senior citizens,.
- Psychiatric nurses should be able to identify the problems, helps the clients to ventilate their feelings and using an empathetic approach.

- Psychiatric nurses should the clients to adjust to changes in body function and reassure them to live with chronic illness.
- Psychiatric nurses can provide an music therapy to change in the psychological distress including sleep disturbances.
- Nurses can teach the family members about an music therapy and its benefits in order to increase the sleep in the home.

Nursing Education

- Nurse educators must be specially trained to teach Music therapy.
- Nurse educators can effectively teach the purposes and benefits of Music therapy and it helps the nursing students to gain knowledge regarding an Music therapy, It helps nursing students to perform Music therapy when they are overwhelmed with sleep and also they can teach the old aged clients who are experiencing sleep disturbance in order to increase the sleep.
- The nursing students who are specializing in their masters in the field of mental health can be trained specially to give complementary therapies.
- The nurse educator can create awareness about Music therapy to the family members of terminally ill.

Nursing Research

- Findings of the study provides broad frame work on which further research can be conducted, This study can be a foundation to conduct

research on large population to strongly prove the effectiveness of Music therapy.

- The understanding of this study helps health professionals and researchers to identify different sources of sleep disturbance of senior citizens clients in Indian perspective.
- Nurse researcher should challenge to perform scientific work and take part in research application and evaluation of Music therapy among senior citizens.
- Nurse researcher should compare the effects of other alternative therapies in increased the sleep.
- Same study can be done on other senior citizens clients like other Psycho physiological disorders.

Nursing Administration

- The nurse administrators can motivate the psychiatric nurses to assess the level of sleep quality among the family members of psychiatric illness and can intervene to increase the level of sleep quality.
- The nurse administrator should arrange for education program to disseminate the research findings and emphasis about the benefits of Music therapy.
- The Nurse administrator can prepare skilled nurses who can spend time with people in solving psychological and physiological disequilibrium in clients.

RECOMMENDATIONS

- A similar study can be replicated with larger sample size and in various other settings.
- A similar study can be conducted among senior citizens clients like HIV and other Psycho physiological disorders.
- A similar study can be conducted to compare the effects of Music therapy and any other alternative and complementary therapies.

CONCLUSION

The study was done to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens. Most of the senior citizens have sleep disturbances. This music therapy increase the sleep pattern. The study revealed that there was a significant association between music therapy and selected demographic variable of age, gender, education and marital status.

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ANNEXURE-A

LETTER SEEKING PERMISSION TO CONDUCT A RESEARCH STUDY



SARA NURSING COLLEGE

(Recognised by Govt. of Tamil Nadu,
Affiliated to T.N. Dr. M.G.R. Medical University & Approved by Indian Nursing Council)

Palani Main Road, Manakadavu,
Dharapuram - 638 673, Tirupur District,
Tamil Nadu, South India.

Phone : 04258-244208, Fax : 04258-244254
E-mail : saranursingcollege@gmail.com
website : www.saranursingcollege.com

From,

The Principal,
Sara Nursing college,
Dharapuram.

Date:

Lr.No.SNC.105/06/11

To,

*The administrator
Ambalaya old aged home,
Dindigul*

Respected Sir/Madam,

Mr. Arun. R is a bonafide student of Sara Nursing College, Dharapuram, doing his M.Sc. (N) Programme in Nursing. He is conducting a research study on

"A Study to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected Oldage Home at Dindigul District. The research project is to be submitted to "The Tamilnadu Dr. M.G.R Medical University" as a partial fulfillment of the University requirements for the award of M.Sc. (N) Degree. The Researcher is anticipating that this project will be beneficial in improving the sleep quality among senior citizens at your Oldage Home.

As part of the study she needs to evaluate the effectiveness of Music Therapy on sleep quality among senior citizens at selected Oldage Home at Dindigul District and document the collected data for analysis and report.

Hence I request your kind consent for him to conduct the study in your esteemed Institution. Further details of the proposed project outcome will be furnished by the researcher in person. The institution norms, policies and ethics will be respected and strictly adhered by the researcher throughout the study period (July month).

*Approved this study
K. Arundhaney
25/6/11*
ADMINISTRATOR,
AMBALAYA OLD AGED HOME,
R.V.S. LEONAGE ROAD, DINDIGUL.

Thanking You



[Signature]
Principal
PRINCIPAL
Sara Nursing College,
Dharapuram - 638 673.

DEMOGRAPHIC PROFILE

Instructions:

The participants are requested to read the following items given below. Please answer all the question, The Responses will be kept confidential.

DEMOGRAPHIC DATA:

• Sample No:

Date:

1. Age

- a) 60 – 65 years ☐
- b) 66 – 70 years ☐
- c) 71 – 75 years ☐
- d) 76-80 Years ☐

2. Gender

- a) Male ☐
- b) Female ☐

3. Religion

- a) Christian ☐
- b) Hindu ☐
- c) Muslim ☐

4. Education

- a) No formal education ☐
- b) Primary education ☐
- c) Higher Secondary education ☐
- d) Graduates ☐

5. Previous Occupation

- a) Un employee []
 - b) Private job []
 - c) Government service []
 - d) Business []
 - e) Self employee []
6. Monthly income
- a) Below Rs . 1000 []
 - b) Rs . 1001 – 3000 []
 - c) Rs. 3000 – 4000 []
 - d) Above 4000 []
7. Marital status
- a) Married []
 - b) Unmarried []
 - c) Divorced []
 - d) Widow []
8. Type of family
- a) Nuclear family []
 - b) Joint family []
 - c) Extended family []
9. Food habits
- a) Vegetarian []
 - b) Non vegetarian []
10. Source of income
- a) Home []
 - b) Pension []
 - c) Other association []

SECTION-B**TOOL****GRONINGEN SLEEP QUALITY SCALE**

ITEM	DESCRIPTOR	TRUE	FALSE
1	I had a deep last night		
2	I feel that slept poorly last night		
3	It took me more than half an hour to fall a sleep last night		
4	I woke up several times last night		
5	I felt tired after waking up this morning		
6	I feel that I didn't get enough sleep last night		
7	I got up in the middle of the night		
8	I felt rested after walking up this morning		
9	I feel that only had a couple of hours sleep last night		
10	I feel that I slept well last night		
11	I didn't sleep a wink last night		
12	I didn't have trouble falling asleep last night		
13	After I woke up last night , I had trouble falling asleep again		
14	I tossed and turned all night last night		
15	I didn't get more than 5 hours sleep last night		

Section B: Groningen sleep quality scale

It helps to assess the sleep quality of the senior citizens, which has 15 items to measure the quality of sleep. The scale was translated in Tamil. The accuracy of the translation was confirmed by back translation. The first question does not count for the total score. One point was awarded if the answer is true to the item numbers 2,3,4,5,6,7,9,11,13,14 and 15 and zero was given if it is false. For item numbers 8, 10, 12 reverse scoring has been given. The total possible score was 15. The total score of each subject was calculated and interpreted as follows;

1 – 2 : Good sleep

3 – 5 : Average sleep

6 – 15 : Poor sleep

பகுதி - 2

கிரானின்ஜனின் உறக்க தன்மைக்கான அளவுகோல்

தேதி:

நேரம்:

வ.எண்	விளக்கம்	சரி	தவறு
1	நான் நேற்று இரவு ஆழ்ந்த உறக்கத்தில் இருந்தேன்		
2	நான் நேற்று இரவு குறைவாக தூங்கியது போல் உணர்கிறேன்.		
3	நேற்று இரவு எனக்கு தூக்கம் வருவதற்கு அரைமணி நேரத்திற்கு மேல் ஆனது.		
4	நான் நேற்று இரவு பலமுறை தூக்கத்திலிருந்து விழித்துக் கொண்டேன்.		
5	நான் காலையில் எழுந்த பிறகு களைப்பாக இருப்பது போல் உணர்கிறேன்.		
6	நான் நேற்று இரவு போதுமான உறக்கம் இல்லாதது போல் உணர்கிறேன்.		
7	நான் நடு இரவில் விழித்து கொண்டேன்.		
8	நான் காலையில் தூங்கி எழுந்த பிறகு களைப்புடன் இருப்பதாக உணர்கிறேன்.		
9	நான் நேற்று இரவு இரண்டு மணி நேரம் மட்டும் தூங்கியதாக உணர்கிறேன்.		
10	நான் நேற்று இரவு நன்றாகத் தூங்கியதாக உணர்கிறேன்.		
11	நான் நேற்று இரவு சிறிது நேரம் கூட தூங்கவில்லை.		
12	நான் நேற்று இரவு எவ்வித இடையூறுமின்றி உறங்கினேன்.		
13	நான் நேற்று இரவு தூங்கி எழுந்த பிறகும் தூக்கத்தின் தாக்கம் இருந்தது.		
14	நான் நேற்று இரவு திரும்பி திரும்பி படுத்திருந்தேன்.		
15	நான் நேற்று இரவு 5 மணி நேரத்திற்கு மேல் தூங்கவில்லை.		

MUSIC THERAPY

Music Relaxation Technique has been put forward as a cost-effective and accessible intervention for older adults experiencing symptoms of sleep disturbances, anxiety, depression and distress. Researchers at Stanford University School of Medicine, USA monitored thirty older adults who had been diagnosed with major or minor depressive disorder. The researchers concluded that there was great potential for Music Relaxation Technique as a beneficial intervention especially for homebound elderly people and others who have limited access to health care professionals.

Primary benefits of music therapy are being completely risk-free, showing cost effective and no side effects. Based on a psycho physiological theory synthesized from literature, sedative music induces relaxation and distraction responses, which reduce activity in neuro-endocrine and sympathetic nervous systems, result in decreased anxiety, heart rate, respiratory rate, blood pressure.

The art of music therapy at the at the present time is the most recent link in an unbroken chain of practices which originated in ancient civilizations such as Egyptian and the more antiquity of the concepts is as it was to people in the ancient work to they too looked to their ancestors for guidance.

Main Goal of Music therapy:

To help the patients to express thoughts, emotions and feelings through their relaxation music.

Music therapy:

1. Music therapy is a form of treatment using simple art materials.
2. Music therapy allows spontaneous facial expression.
3. Music therapy is non-judgmental.
4. Music therapy allows free articulation of repressed thoughts and feelings.
5. Music therapy allows expression without the threat of repercussion.
6. Music therapy allows previously undisclosed feelings to be externalized.

Importance of Music therapy:

- It is used as a diagnostic and therapeutic tool.
- It provides socially acceptable outlet for fantasy and wish fulfillment
- It helps the patient to gain relief from anxiety by graphically representing conflict and aggressive and traumatic material without guilt.
- Improve the sleep pattern

Forms of Music therapy:

- Dance and creative movement
- Instrumental music
- Drama and poetry
- Hearing relaxation music
- Soft and pleasant music

Areas of music Therapy:

Music Relaxation Technique has been proven to be an effective form of therapy in a variety of areas for a multitude of ailments. However, there is still much more theorizing, discussion, and research that needs to be done in this area, and that fact makes it all the more interesting. Through technological advances and constantly

evolving musical styles as well as cross-cultural influences, this is one form of therapy that will never cease to be innovative and topical. Hopefully, researchers will continue to treat this topic as a serious area of psychology and one that deserves to be molded into a more scientific pedagogy through advancement and refinement of research and therapeutic techniques. I believe there is much more to be discovered about music and its effect on humanity.

Benefits of Music therapy:

- Self-discovery
- Personal fulfillment
- Empowerment
- Relaxation and stress relief
- Symptom relief and physical rehabilitation:

Indications:

- Anxiety, Depression
- Sleep disorders
- Mental and emotional problems and disorders
- substance Abuse
- Conflicts
- Learning disability.

Setting:

- One to one basis
- Residential home
- Educational Institution

- Wellness Centre
- Public and community agencies and clinics

Categories of music therapy:

- Middle age pieces
- Classical pieces
- Jazz pieces
- Rock and roll pieces
- Romance pieces

Techniques for Group and Individual music therapy:

I. Exploration Tasks :

An exploration task can be quite liberating. The goal is to encourage the patient/client to let go of conscious thoughts and controls, and to have them express themselves as freely and spontaneously as possible. In this way, exploration tasks are very much akin to verbal free associations. Exploration tasks are generally used in the beginning sessions of music therapy.

II. Rapport-Building :

Rapport-building exercises are used in both individual and group music therapy settings..

III. Expression of Inner Feelings :

These techniques are designed to help the patient/client get in touch with inner feelings, desires and fantasies and to make visual representations of them. This is done in the hopes that the patient will become increasingly aware of him or herself.

The therapist will then attempt to help the patient/client deal with these feelings, and move in a direction toward a solution. Improve the sleep pattern.

IV. Self Perception:

The self perception technique is aimed at moving a client toward a more complete awareness of personal needs and body image.

V. Interpersonal Relations

The interpersonal relations technique is designed to make the patient/client more aware of others, and how others may perceive him or her.

Why senior citizens with sleep quality use music therapy?

As with many types of complementary therapies, senior citizens with sleep quality use music therapy to help themselves feel better and more positive. Music therapists promote this type of therapy as a way to help people,

- Express buried emotions
- Improve the sleep pattern
- Cope with grief
- Cope with fear, anxiety, stress and depression
- Achieve a sense of freedom and self confidence

Music therapy is effective in increasing the level of sleep quality among senior citizens. So, music therapy can be practiced in old age home and in other set up to help patients and family members to cope with sleep disturbances.

ANNEXURE-C

LETTER REQUESTING OPINION AND SUGGESTION OF EXPERTS FOR CONTENT VALIDITY OF THE RESEARCH TOOLS

From

Mr.Arun.R
Final Year M.Sc., (N),
Sara Nursing College,
Dharapuram, Tirupur District

To,

Respected Sir/ Madam,

Sub: Requesting opinion and suggestion of experts for establishing content validity of the tools.

I, **Mr.Arun.R**, a Final Year M.Sc., (Nursing) student of Sara Nursing College, Dharapuram. I have selected the topic mentioned below for the research project to be submitted to The Tamil Nadu Dr. M.G.R Medical University, Chennai for the fulfillment of .Masters Degree in Nursing.

Topic: A study to evaluate the effectiveness of Music therapy on sleep quality among senior citizens at selected old age home in Dindigul District.

I wish to request you to kindly validate the tool and give your expert opinion for necessary modification. I will be grateful to you for this.

Thanking you

Place: Dharapuram

Yours Sincerely,

Date:

(Mr.Arun.R)

Enclosed:

1. Certificate of validation
2. Criteria checklist of evaluation of tool
3. Tool for collection of data
4. Procedur

ANNEXURE-D
CERTIFICATE OF VALIDATION

This is to certify that the tool developed by, **Mr.Arun.R**, Final year M.Sc. Nursing student of Sara Nursing College, Dharapuram (affiliated to Dr.M.G.R.Medical University) is validated and can proceed with this tool and content for the main study entitled “**A study to evaluate the effectiveness of Music therapy on sleep quality among senior citizens at selected old age home in Dindigul District**”.

Signature with Date

ANNEXURE-E
LIST OF EXPERTS

1. Prof. Mrs. R. Kalai selvi, M.Sc(N)

Reader,
Bishops college of nursing,
Dharapuram

2. Prof. Mrs.Rojina J.S.Savarimuthu, M.Sc(N)

Nursing Tutor,
College of Nursing, Govt. Madurai Medical college,
Madurai.

3. Prof.Mrs. Modana selvan M.Sc(N)

lecturer,
Bishops college of nursing,
Dharapuram

4. Dr.Dheep, M.D.,

Psychiatrist,
Dheep Psychiatric Clinic,
K.Pudur, Madurai.

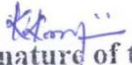
5. Mrs.Kavitha M.phil (Psy).,

Clinical psychologist,
Govt. Headquarters Hospital,
Mannargudi

ANNEXURE -F

ENGLISH EDITING CERTIFICATE

I hereby certify that, I have edited the work of **Mr R.ARUN**, II year M.Sc Nursing student of SARA NURSING COLLEGE, DHARAPURAM, who has undertaken dissertation work on **“A study to evaluate the effectiveness of Music therapy on sleep quality among senior citizens at selected old age home in Dindigul District 2010-2012)”**


Signature of the Expert
K.KOTEESWARAN, M.A., B.Ed.,
P.G. Asst. (English)
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Thiruvarur.

TAMIL EDITING CERTIFICATE

I hereby certify that, I have edited the work of **Mr R.ARUN**, II year M.Sc Nursing student of SARA NURSING COLLEGE, DHARAPURAM, who has undertaken dissertation work on “**A study to evaluate the effectiveness of Music therapy on sleep quality among senior citizens at selected old age home in Dindigul District 2010-2012**)”

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